



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,998	11/01/2001	Ana Belen Benitez-Jimenez	YOR920000785	3328

7590 11/29/2004

IBM CORPORATION
INTELLECTUAL PROPERTY LAW DEPT.
P.O. BOX 218
YORKTOWN HEIGHTS, NY 10598

EXAMINER

BELL, MELTIN

ART UNIT	PAPER NUMBER
----------	--------------

2121

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,998

Applicant(s)

BENITEZ-JIMENEZ ET AL.

Examiner

Meltin Bell

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/13/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to application **10/002,998** filed 08/31/2004 as well as the Specification, Drawing Corrections and Amendment filed 08/13/2004. Claims 1-27 filed by the applicant have been entered and examined. An action on the merits of claims 1-27 appears below.

Priority

Applicant's claim for domestic priority against application number 60/246,052 filed **11/06/2000** under 35 U.S.C. 119(e) is acknowledged.

Claim Rejections - 35 USC § 102

Applicant's arguments have been fully considered, but they are not persuasive. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 3-24 are rejected under 35 U.S.C. 102(e) as being anticipated by *Bergman et al* U.S. Patent Number 6,564,263 (Dated May 13, 2003; Filed December 3, 1999).

Regarding claim 1:

Bergman et al teaches,

- forming a network having nodes (column 10, lines 11-29) that represent semantic concepts (Figs. 8-9; column 20, lines 57-65)
- associating one or more words with one or more of the nodes (column 22, lines 40-67)
- associating multimedia content with one or more of the nodes (Figs. 11-15; column 11, lines 1-11)
- representing relationships between the nodes as arcs between associated words and arcs between associated multimedia content (Figs. 5-6, 15; column 3, lines 17-51; column 4, lines 20-27; column 17, lines 49-59)

Regarding claim 3:

Bergman et al further teaches,

- relationships (column 3, lines 46-51; column 9, lines 55-65; column 17, lines 30-40) between semantic concepts (column 20, lines 57-65) and between associated content (column 5, lines 65-67; column 6, lines 1-20; column 11, lines 30-59) are based (column 19, lines 15-24) at least in part on audio and/or visual (column 2, lines 31-37) feature descriptor (column 8, lines 42-54) values (column 12, lines 48-50)

Regarding claim 4:

Bergman et al further teaches,

- extracting feature descriptors from multimedia content (column 8, lines 45-46; column 9, lines 26-54)
- computing similarity measures between descriptor values (column 13, lines 25-39)

Regarding claim 5

Bergman et al further teaches,

- the media network knowledge is represented using the ISO MPEG-7 Description Definition Language (column 14, lines 45-67; column 15, lines 1-3; column 21, lines 65-67; column 22, lines 1-24)

Regarding claim 6:

Bergman et al teaches,

- accepting a query (column 22, lines 5-9)
- matching the query to the words and multimedia content related to the concepts encoded (column 2, lines 34-37) in the media (column 7, lines 17-25) network knowledge representation (column 22, lines 9-16)
- navigating the relationship arcs of the concepts associated with matching words and multimedia content (column 23, lines 22-53)
- retrieving related concepts, words, and multimedia content from the matched nodes (column 10, lines 11-29) or related nodes (Figs. 9, 11-14, 17-19; column 22, lines 26-39)

Regarding claim 7:

The rejection of claim 6 is incorporated. Therefore, claim 7 is rejected under the same rationale as claim 6.

Regarding claim 8:

The rejection of claim 6 is incorporated. Therefore, claim 8 is rejected under the same rationale as claim 6.

Regarding claim 9:

Bergman et al teaches,

- forming a query (Fig. 19; column 5, lines 6-10) comprised of audio and/or visual (column 2, lines 31-37) feature (column 5, lines 21-43) descriptor (column 8, lines 42-54) values (column 12, lines 48-50), wherein the feature descriptor values denote proximity (column 1, lines 56-61) to the semantic concepts (column 20, lines 57-65) of the nodes (column 10, lines 11-29)
- matching the query (column 22, lines 37-38) descriptor (column 8, lines 42-54) values (column 12, lines 48-50) to the descriptor values of the content encoded (column 2, lines 34-37) in the media network knowledge representation (column 7, lines 17-25)

Regarding claim 10:

Bergman et al teaches,

- displaying one or more concept nodes and associated words and/or multimedia content (column 5, lines 44-62; column 7, lines 44-62)
- providing means for allowing a user to select related concepts for viewing (Figs. 1-2; column 19, lines 26-49)

Regarding claim 11:

Bergman et al further teaches,

- providing means for allowing the user to select concept nodes and associated words and/or multimedia content for display on the basis of specific types or values of relations to a particular concept node or associated word or multimedia content (column 10, lines 1-44; column 19, lines 64-67)

Regarding claim 12:

Bergman et al teaches,

- extracting a subset of nodes, relations, and words and/or multimedia content from an encoded media network knowledge representation (column 9, lines 39-54)

Regarding claim 13:

Bergman et al further teaches,

- consolidating together concept nodes, relations, words, and/or multimedia content (column 9, lines 55-67; column 10, lines 1-10)

Regarding claim 14:

Bergman et al teaches,

- adding, deleting or modifying concepts, relations, or associated words, multimedia content, or descriptors in the encoded media network knowledge representation (column 12, lines 48-50)

Regarding claim 15:

Bergman et al teaches,

- searching the encoded media network knowledge representation (column 23, lines 22-34)
- retrieving words, content, and/or descriptors from the media network knowledge representation (column 23, lines 34-36)
- searching the information repository using the retrieved words, content, and/or descriptors (column 23, lines 37-43)

Regarding claim 16:

Bergman et al teaches,

- describing the multimedia information using words or descriptors (Abstract)
- describing user preferences using words multimedia content, and/or descriptors (column 3, lines 37-51; column 21, lines 65-67; column 22, lines 1-4)
- matching the user preferences with the descriptions of the multimedia information (Fig. 16; column 11, lines 60-67; column 12, lines 1-11)
- extracting, retrieving, and/or summarizing the matched multimedia items (column 10, lines 38-67)

Regarding claim 17:

Bergman et al teaches,

- means for (Fig. 1) forming a network having logical (column 13, lines 25-39) nodes (column 10, lines 11-29) that represent semantic (Fig. 9; column 9, lines 55-65) concepts (column 5, lines 65-67; column 6, lines 1-20; column 12, lines 24-42)

Art Unit: 2121

- means for associating one or more words with one or more of the nodes (column 10, lines 15-37; column 22, lines 40-67)
- means for associating multimedia content with one or more of the nodes (Figs. 11-15; column 10, lines 38-50; column 11, lines 1-11)
- means for representing relationships between the nodes as arcs between associated words and arcs between associated multimedia content (Figs. 5-6, 15; column 3, lines 17-51; column 4, lines 20-27; column 17, lines 49-59)

Regarding claim 18:

Bergman et al further teaches,

- means for searching the knowledge encoded in the network (column 23, lines 22-34)

Regarding claim 19:

Bergman et al further teaches,

- means for browsing the knowledge encoded in the network (column 23, lines 30-53)

Regarding claim 20:

Bergman et al further teaches,

- means for updating the knowledge encoded in the network (column 12, lines 48-50)

Regarding claim 21:

Bergman et al further teaches,

- means for summarizing the knowledge encoded in the network (column 10, lines 38-67)

Regarding claim 22:

Bergman et al further teaches,

- means for querying a multimedia information repository associated with the knowledge encoded in the network (column 22, lines 5-9)

Regarding claim 23:

Bergman et al further teaches,

- means for personalizing the knowledge encoded in the network for a particular user (column 3, lines 37-51; column 21, lines 65-67; column 22, lines 1-4)

Regarding claim 24:

Bergman et al teaches,

- first instructions (Figs. 17-18) for forming a network having logical (column 13, lines 25-39) nodes (column 10, lines 11-29) that represent semantic (Fig. 9; column 9, lines 55-65) concepts (column 5, lines 65-67; column 6, lines 1-20; column 9, lines 39-67; column 12, lines 24-42)
- second instructions for associating one or more words with one or more of the nodes (column 10, lines 15-37; column 22, lines 40-67)
- third instructions for associating multimedia content with one or more of the nodes (Figs. 11-15; column 10, lines 38-50; column 11, lines 1-11)
- fourth instructions for representing relationships between the nodes as arcs between associated words and arcs between associated multimedia content (Figs. 5-6, 15; column 3, lines 17-51; column 4, lines 20-27; column 17, lines 49-59)

Regarding claim 25:

Bergman et al teaches,

- the relationships (column 3, lines 46-51; column 5, lines 65-67; column 6, lines 1-20; column 9, lines 55-65; column 17, lines 30-40) between the nodes (column 10, lines 11-29) are based (column 19, lines 15-24), at least in part, on the features (column 8, lines 42-54) of the multimedia content (column 5, lines 65-67 ; column 6, lines 1-20)

Regarding claim 26:

Bergman et al teaches,

- the relationships (column 3, lines 46-51; column 5, lines 65-67; column 6, lines 1-20; column 9, lines 55-65; column 17, lines 30-40) between the nodes (column 10, lines 11-29) denote similarity (column 13, lines 25-39) of semantic concepts (column 20, lines 57-65)

Regarding claim 27:

Bergman et al teaches,

- extracting descriptors (column 8, lines 42-54) from the multimedia content (column 5, lines 65-67 ; column 6, lines 1-20), the descriptors denoting semantic concepts (column 20, lines 57-65)

Claim Rejections - 35 USC § 103

Applicant's arguments have been fully considered, but they are not persuasive. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2121

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Office presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Office to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Bergman et al* U.S. Patent Number 6,564,263 (Dated May 13, 2003; Filed December 3, 1999) in view of *Miller* "WordNet: A Lexical Database for English" (November 1995).

Regarding claim 2:

Bergman et al teaches,

- forming a network having nodes that represent semantic concepts (Fig. 9; column 9, lines 39-67, "In one multimedia...is illustrated in FIG. 9"; column 10, lines 11-29, "Preferably, each connection...the multimedia content")
- associating one or more words with one or more of the nodes (column 22, lines 40-67, "The video component...for the story")

Art Unit: 2121

- associating multimedia content with one or more of the nodes (Figs. 11-15; column 11, lines 1-11, "FIG. 12 illustrates an example...multiple fidelities may exist")
- representing relationships between the nodes as arcs between associated words and arcs between associated multimedia content (Figs. 5-6, 15; column 3, lines 17-51, "It is a further...merging of objects, etc."; column 4, lines 20-27, "FIG. 5 is a logical...the present invention"; column 17, lines 49-59, "FIG. 5 shows that...ends after object D")
- creating relations between semantic concepts on the basis of one or more of: word forms and word meaning of associated words (column 5, lines 65-67, "a multimedia content...digital form in"; column 6, lines 1-14, "terms of either...and non-terminal objects"; column 7, lines 2-43, "Multimedia content typically...or semantics pyramid"; column 9, lines 26-38, "the spatial or...object, event, etc."; column 12, lines 24-57, "the multimedia content...data types T1, T2, T3, etc.")

However, *Bergman et al* doesn't explicitly teach creating lexical relations between semantic concepts on the basis of one or more of: word forms and word meaning of associated words while *Miller* teaches,

- creating lexical relations between semantic concepts on the basis of one or more of: word forms and word meaning of associated words (page 39, paragraphs 1-2, "Because meaningful sentences...to be synonymous")

Motivation - The portions of the claimed method would have been a highly desirable feature in this art for

- Supporting syntactic categories (*Miller*, page 40, paragraph 2, "WordNet respects the...explication in WordNet")

Art Unit: 2121

- Providing a unified means for describing multimedia content as well as spatial and temporal characteristics between multiple objects (*Bergman et al*, column 2, lines 58-67, “Despite the latest... of multimedia objects”)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine *Bergman et al* with *Miller* to obtain the invention specified in claim 2, a method for encoding knowledge. The purpose of *Miller's* invention is to provide a unified means for describing multimedia content as well as spatial and temporal characteristics between multiple objects and would thus provide the motivation for combining *Bergman* with *Miller*.

RESPONSE TO APPLICANTS' AMENDMENT REMARKS

Applicant argues that support for new claim 27 can be found on page 7, lines 7-22 (Amendment REMARKS, page 19, paragraph 3) and that no new matter has been added in the addition of new claims 25-27 (Amendment REMARKS page 19, paragraphs 1-3) or the amendment of claim 9 (Amendment REMARKS page 15, paragraph 5). However, it is noted that support for new claim 27 is missing from page 7, lines 7-22.

Drawings

Applicant argues that the accessing operation 110 covers both sending information to and receiving information from the media network knowledge

representation 111 as discussed in the specification for traversing the Fig. 1 objection (Amendment REMARKS page 12, paragraph 2). Applicant's arguments have been fully considered and are persuasive. The objection to Fig. 1 is withdrawn.

Applicant argues that no correction to Fig. 2 is required due to the specification amendment beginning at page 10, line 1 (Amendment REMARKS page 12, paragraph 3). Applicant's arguments have been fully considered and are persuasive. The objection to Fig. 2 is withdrawn.

Applicant argues that the amendment to Fig. 4 and specification item numbering provide consistency between the figures and the specification (Amendment REMARKS page 12, paragraph 4). Applicant's arguments have been fully considered and are persuasive in regards to the Fig. 4 objection so the objection to Fig. 4 is withdrawn. However, the objection to the specification for parentheses around item numbers is maintained.

Applicant argues that the reference number change of 500 to 111 at page 12, line 16 resolves the objection to the figures (Amendment REMARKS page 12, paragraph 5). Applicant's arguments have been fully considered and are persuasive in regards to the page 12, line 16 amendment. However, it is noted that the same correction wasn't applied to page 12, line 19.

Specification

Applicant argues that the change to the title is more descriptive: Network for Describing Multimedia Information (Amendment REMARKS page 13, paragraph 1).

Art Unit: 2121

Applicant's arguments have been fully considered and are persuasive. The objection to the title is withdrawn.

Applicant argues that the WORDNET associated revisions to the specification resolve the trademark objection and questions ownership attributions required for trademark rights to the terms MPEG, XML and BIM (Amendment REMARKS page 13, paragraph 2). Applicant's arguments have been fully considered and are persuasive. The trademark objections are withdrawn.

Applicant argues that the page 1, line 9 amendment to the specification resolves the 'concepts' objection (Amendment REMARKS page 13, paragraph 3). Applicant's arguments have been fully considered and are persuasive. The 'concepts' objection is withdrawn.

Applicant argues that the term 'content node' is not located at page 15, line 14 in the specification (Amendment REMARKS page 13, paragraph 4). Applicant's arguments have been fully considered. The examiner notes typos in the original objection and thanks the applicant for such a thorough review of the first action on the merits mailed May 13, 2004: 'initial node' on page 15, line 7 would read well as 'initial content node'.

It is also noted that change bars, strikethrough and underlining were not used in the specification amendments. The underlining of amended claims portions is much appreciated.

Claim Rejections - 35 USC § 101

Applicant argues that claims 1, 6, 12 and 14-16 recite statutory subject matter (Amendment REMARKS page 13, paragraph 6). Applicant's arguments have been fully considered and are persuasive. The 35 USC 101 rejections of claims 1, 6, 12 and 14-16 are withdrawn.

Claim Rejections - 35 USC § 102

Applicant argues that Bergman USPN 6,564,263 does not supply claim 1's teaching of forming a network having nodes that represent semantic concepts (Amendment REMARKS page 14, paragraph 3) and that claims 2-5 are allowable for the same reasons as claim 1 (Amendment REMARKS page 14, paragraph 4). Applicant's arguments have been fully considered, but they are not persuasive. In consideration of the subject application paragraph beginning on page 10, line 1 ("the media network knowledge representation can be fully represented using any computer data structures that allow modeling of graphs or networks"), Bergman Figs. 8-9, column 10, lines 11-29 and column 20, lines 57-65 are cited for explicitly and inherently disclosing the subject matter set forth in the claims by the applicants. In addition to the 35 USC 102 and 103 rejections given above, claims 2-5 are not allowable for being dependent on a rejected independent claim.

Applicant argues that Bergman does not teach claim 3's basing relationships between *nodes* on audio and/or visual feature descriptor values (Amendment REMARKS page 15, paragraph 2). Applicant's arguments have been fully considered,

Art Unit: 2121

but they are not persuasive. Column 3, lines 46-51, column 9, lines 55-65, column 17, lines 30-40, column 20, lines 57-65, column 5, lines 65-67, column 6, lines 1-20, column 11, lines 30-59, column 19, lines 15-24, column 2, lines 31-37, column 8, lines 42-54 and column 12, lines 48-50 are cited for explicitly and inherently disclosing the subject matter set forth in claim 3 by the applicants: relationships between **semantic concepts and between associated content** are based at least in part on audio and/or visual feature descriptor values.

Applicant argues that Bergman does not teach a network having nodes that represent semantic concepts as related to claims 6 (Amendment REMARKS page 15, paragraph 3), 10 (Amendment REMARKS page 15, paragraph 6), 12 (Amendment REMARKS page 16, paragraph 2), 14 (Amendment REMARKS page 16, paragraph 4), 15 (Amendment REMARKS page 16, paragraph 5), 16 (Amendment REMARKS page 16, paragraph 6), that claims 7-9 are allowable for the same reasons as claim 6 (Amendment REMARKS page 15, paragraph 4), that claim 11 is allowable for the same reasons as claim 10 (Amendment REMARKS page 16, paragraph 1) and that claim 13 is allowable for the same reasons as claim 12 (Amendment REMARKS page 16, paragraph 3). Applicant's arguments have been fully considered, but they are not persuasive. Column 22, lines 5-16, column 2, lines 34-37, column 7, lines 17-25, column 23, lines 22-53, column 10, lines 11-29, Figs. 9, 11-14, 17-19 and column 22, lines 26-39 are cited for explicitly and inherently disclosing the subject matter set forth in claim 6 by the applicants: an encoded media network knowledge representation that comprises a network having nodes that represent semantic concepts. In addition to the

35 USC 102 rejections given above, claims 7-9, 11 and 12 are not allowable for being dependent on a rejected independent claim.

Applicant argues that Bergman does not teach feature descriptor values denoting proximity to semantic concepts of nodes as related to claim 9 (Amendment REMARKS page 15, paragraph 5). Applicant's arguments have been fully considered, but they are not persuasive. Column 2, lines 31-37, column 5, lines 21-43, column 8, lines 42-54, column 12, lines 48-50, column 1, lines 56-61, column 20, lines 57-65 and column 10, lines 11-29 are cited for explicitly and inherently disclosing the subject matter set forth in claim 9 by the applicants.

Applicant argues that Bergman does not teach claim 17's means for forming a network having logical nodes that represent semantic concepts (Amendment REMARKS page 16, paragraph 7 and page 17, paragraphs 1-2) and that claims 18-23 are allowable for the same reasons claim 17 is allowable (Amendment REMARKS page 17, paragraph 3). Applicant's arguments have been fully considered, but they are not persuasive. Column 13, lines 25-39, column 10, lines 11-29, Figs. 1, 9, column 9, lines 55-65, column 5, lines 65-67, column 6, lines 1-20 and column 12, lines 24-42 are cited for explicitly and inherently disclosing the subject matter set forth in claim 17 by the applicants. In addition to the 35 USC 102 rejections given above, claims 18-23 are not allowable for being dependent on a rejected independent claim.

Applicant argues that Bergman does not teach or represent claim 24's semantic concepts (Amendment REMARKS page 17, paragraph 5 and page 18, paragraph 1). Applicant's arguments have been fully considered, but they are not persuasive. Figs. 9,

17-18, column 5, lines 65-67, column 6, lines 1-20, column 9, lines 39-67, column 12, lines 24-42, column 9, lines 55-65, column 10, lines 11-29, column 13, lines 25-39 and column 20, lines 57-65 are cited for explicitly and inherently disclosing the subject matter set forth in the claims by the applicants.

Claim Rejections - 35 USC § 103

Applicant argues that no evidence has been presented for combining Bergman with Miller "WordNet: A Lexical Database for English" in the rejection of claim 2 (Amendment REMARKS page 18, paragraph 5). Applicant's arguments have been fully considered, but they are not persuasive. The purpose of Miller's invention is to provide a unified means for describing multimedia content as well as spatial and temporal characteristics between multiple objects and would thus provide the motivation for combining Bergman with Miller.

As set forth above with regards to Bergman and Miller, the items listed explicitly and inherently teach each element of the applicants' claimed limitations. Applicants have not set forth any distinction or offered any dispute between the claims of the subject application, Bergman's Multimedia content description framework and Miller's WordNet: A Lexical Database for English.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The following prior art made of record is considered pertinent to applicant's disclosure:

- *Vaithilingam et al* USPN 6,411,724; Using meta-descriptors to represent multimedia information

- descriptor values for specifying semantic relationships in multimedia data (column 10, lines 19-33)
- encoding equivalence relationships between audiovisual feature descriptors (column 11, lines 37-52)
- associating content (column 12, lines 21-27) to concepts using feature descriptors (column 11, lines 17-30)
- the proximity matrix in clustering for aiding machine learning and knowledge representation in artificial intelligence (column 6, lines 3-26)

- *Smith et al* USPN 6,819,797; Method and apparatus for classifying and querying temporal and spatial information in video

Art Unit: 2121

- content classified by semantic class (column 6, lines 16-22) based on feature (column 3, lines 24-26) descriptor values for capturing spatial and temporal relationships statistically (column 7, lines 35-39)

Any inquiry concerning this communication or earlier communications from the Office should be directed to Melvin Bell whose telephone number is 571-272-3680. This Examiner can normally be reached on Mon - Fri 7:30 am - 4:00 pm.

If attempts to reach this Examiner by telephone are unsuccessful, his supervisor, Anthony Knight, can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MB / M. B.



Anthony Knight
Supervisory Patent Examiner
Group 3600